



SEQUENCE LISTING

**COPY**

<110> Ranganathan, Rakesh  
Horvitz, H. R.  
Cannon, Stephen C.

<120> NOVEL SEROTONIN-GATED ANION CHANNEL

<130> 01997/521003

<140> 09/717,743  
<141> 2000-11-21

<150> 09/559,622  
<151> 2000-04-27

<150> 60/131,149  
<151> 1999-04-27

<160> 6

<170> FastSEQ for Windows Version 4.0

<210> 1  
<211> 5550  
<212> DNA  
<213> *Caenorhabditis elegans*

<400> 1						
tcatgtttca	cggaacgacg	aatttatccc	gtcgtttctt	cctttccgtt	ttaactcata	60
tctcttcctg	gatccttcag	agctcttgc	aattcctcac	gttttttttt	gttttttcgt	120
cgtttaattg	tggaaacaca	tatccgtcct	cttggaaaca	gcacagaaa	actttctgct	180
ctccgtgtcc	ttctacttac	tctgattgcc	ttagtttagtc	acatcgcaag	caacaactaa	240
ctgccaatgg	gaggagccag	ttggagcagg	gtgcgtgctc	gggtctcttt	tcagaaggtt	300
ttctcttgtg	ccagcatgct	ttttgaggc	tgtgtcatca	caatgaacat	gtgtgagttc	360
atccgtctgg	attattcttt	ttcttacgtc	ttctgagttac	ttcatacttt	ccaaatttttt	420
caactgaact	tttcttcctt	tctcattgaa	gtggtttgg	tttggtcgcg	tgatcaacgg	480
atccctacttt	tttggaaacaa	aatgtttttt	aagtttcaca	gactgatttc	ggggtttttt	540
caaagaatat	attccctctc	gagcaagaga	aaattccaga	aaatagtagt	tttttcaat	600
tagtcgttcc	atttgtacta	gctaaaaaac	ttgcaactta	tggctttaaa	acatgtgttg	660
gcttcataca	aaaacattta	actagtgttt	ttccagtttt	gttttcgttt	cattttctca	720
ccaaactgac	aataattact	ttctgtgaac	gtgtttgt	ggcaagctcc	cgaatatttt	780
tttctcttct	cacgtcttgc	tatttctcg	attttatttt	ctgaatctgt	gcccgtttca	840
atcaatttga	ttgcgataat	tattctatca	gaaatataatt	ttcagaatc	caaatactcc	900
aggtgcaat	gcggtgaaag	aaaattatga	agtttattcc	tgaaatcaca	ctactcttgc	960
ttttatttgc	acactctaca	caggttagtt	ggttgattct	agatctcttgc	cctccctagct	1020
tgcaaggata	atataattga	attgttttttgc	aggagtgc	agattgaata	gttttctata	1080
tttaggctaa	aggaaaaacga	cgaaaaatgtc	cgagggtgc	gtggtcggaa	ggaaagatta	1140
tgaacacgat	catgagcaac	tacacgaaaa	tgttgcggca	cgcggaggac	agcgtacaag	1200
ttaatattga	gattcatgt	caggttggt	gactctataa	ttgcacacca	atatgtgaaa	1260
gttttcttta	aaattaaact	gctgtaaatg	acttttgaat	aagtttataca	gatagaaatt	1320
gtctgaactt	ttcgattcaa	actttccgaa	cttcaaagcg	gttccaaatt	actcacttcc	1380
atttatctct	ttgctacaat	ttctcccaca	aagccttttt	cttcatttaa	cgtttttttt	1440
tatgtcggtt	ttcttacaaa	caatttcgtc	tccttgatga	actgcttgaa	ctgagaatag	1500
tcacatgagg	ataaatttga	tggaatgaca	agtttggc	ccagaaggca	gttttgcact	1560
gaacttggc	agttgcagac	acatctcaa	acacagaaga	tgagtggaaa	actagtgaga	1620
gactgcca	agtcgaaggg	ataatgaaaa	tttggtgc	atgaattctg	cgaagttatg	1680

tgaaaaatta	ttggattggg	agttgtggg	gtgaagagat	gggtcaaaaag	ccatcaatct	1740
tgaatgcctc	ggtcaaaagat	ttgtttctca	tatgtttaca	acactgaaaa	caatctatcc	1800
tagaaatgtt	tgaaccaccc	tctaaagtcc	ttccgtataat	ttttcatct	ttataccgac	1860
cagaattcaa	gagttgtttg	aaataacttc	ctcttttttgc	gagaatatgt	actcagattt	1920
ttacattcaa	aattttatata	tttcaaata	gaaaaagtgc	caagtaccag	aaacttttat	1980
caagttggcg	gcactttgga	gagtgaattt	gatgaaaaag	tgttgataa	gtttgtcggg	2040
caaactggtc	ccctgggtgg	ggaaatggtg	gcatttttg	aaacattttc	atagtcgaag	2100
aagtggaaaca	agaaaaattgg	aaaatagaga	tacatatgt	tatgaaaata	gaattgaaca	2160
ggaacttatt	tttattttca	ggatatggg	agcttgaatg	aaatatcattc	cgactttgaa	2220
attgacattt	tattcactca	actgtggcat	gactcggcac	tttctttgc	tcatcttcg	2280
gcttgtaagc	ggttaagaaat	ctttgttata	gaagggaaaa	atatttaaat	taatgaaaatt	2340
tcagaaatata	cacaatggaa	acacgacttt	tacctaagat	ttggctccaa	aacacgtgt	2400
tgattaattc	aaaacgaaca	accgtccatg	catcaccatc	gaaaaatgtg	atggttattc	2460
tgtacgaggt	atgatttttgc	atttgtgac	gtcacaaca	gagcatgtct	aggggcatgt	2520
tgttagcaaga	aaaaaaacgga	ttcttgctc	tgtcgacgtt	tcctaagtat	tgtgaattat	2580
ttataataca	tcactcta	tacgtgaata	cttacaccc	taactgggtg	aggataaaaa	2640
tagagaagga	gacgttgaaa	aagctttcg	gttagattaaa	gagtcgttgc	tcgacatatg	2700
tattcatgtt	tctcggttca	gggaaataag	tgattttggc	gaaaaagagt	tagacgacat	2760
tttttagaaaa	actaaaacta	tattctcgaa	cccaaattcag	tctaattgggtt	ttcagcaaaa	2820
agtatgaaat	atacaatgtt	tgtttcagaa	tacccagtac	aaaattttggaa	gtttttcaga	2880
atggAACAGT	ctggatttaac	catcgtctt	gtgtcaaaatc	accttgcatt	ttggatctgc	2940
gacagtttcc	tttcgatact	caaacttgc	tattaatctt	tgaatcttat	agtctataact	3000
cagaagaagt	tgaacttcat	tggatggaa	aagctgtcac	attaatgaag	ccaattcaac	3060
ttcctgactt	tgatatgggtt	cattattcaa	ctaaaaaggaa	aactttactc	tatccaaacg	3120
ggtactggga	tcagcttcaa	gttacttca	cttcaaaacg	acgatatgg	ttcttatattt	3180
ttcaaggctt	tgttccaaca	tatcttacaa	tcattgttac	ttgggtttca	ttctgcattgg	3240
aacccaaaacg	tctgccccca	agaacaactg	tcggatctc	atctttcttca	gctcttactt	3300
tccagtttgg	aaatatttttgc	aaaaatcttc	caagggtttc	atatgtaaaa	gttttttttt	3360
ttttctttt	caaacaaaata	aaaaaaaaga	taaacaataa	tttggtttgc	caatggatgt	3420
gtggatgctt	ggatgcataat	cattttgtt	cggaaccatc	gttagattgg	cattttgttgc	3480
ttacattttcc	cgttgcaga	acagcgtaag	aaagtggatgtt	ggcataagag	ttttctcagc	3540
tggagggaaag	taatttttttgc	tatgaaaata	tcaaaaaacaa	tatcaggaaaa	3600	
ttgaatttca	ctatgatttgc	gtagtaaaca	atttacagcg	cggaacgcac	3660	
atgagaaatt	ctcagggtgt	ggcaaaacgg	tcgtgttagaa	ctagaagacaa	cgggtatgc	3720
aacggggat	ctgttatctc	acattatcat	ccaacaagca	atggaaatgg	gaataataat	3780
cgcacatgata	caccccaatgt	tactggaaagg	tttagcaatct	ctatgatagc	attttatcaat	3840
tattaaagaa	ctctggaaatt	agttttttaa	gtataaataaa	atctcttattt	tttgcaccc	3900
acattgaact	taatagttat	gttttacaga	ggatcaatc	atcgaaaacgg	gccaccatct	3960
ccattaaacc	ttcaaatgac	tacatttgat	tcggagatcc	ctctgactt	tgtatcagggt	4020
agtcttacat	ttagttcaaa	ctttttgtt	ttaagcgttc	tatctgataaa	agttttccgg	4080
tggttttata	atttttgatt	cataaaactta	ccactcc	tctcaactac	atttttaccc	4140
gttcagctgc	cagtttccat	ggaatccgat	agaccctgt	ttgaagaggt	aactgtgaaa	4200
gttagtcaatt	aatccctgt	gttttcttcc	cactcaatcc	ttttgttattt	tttggttcagt	4260
ctatccacta	tcaatgttctt	atcacctcta	gatactgttt	agaagaaaaat	attgttccaca	4320
gttatggaaa	tcacatatac	tttgggttctgg	aattgttat	gtatgttttgc	aaaaagcaca	4380
ttagaataact	acaaacatttca	gttttccatca	gatttttgtat	ttatcaaaaac	cgtttatattt	4440
gacactctt	agttatcata	tttcaattttc	caagaatgtt	atattttgaa	gaagccgggt	4500
attgtcaaaa	agattggaaa	ctccgagttt	ctatataatgc	gaaattttca	tttcagccca	4560
cacacacaca	cacacattca	cgaaacttttgc	tgttgggtt	gttacttata	tgttatcttt	4620
tctgtctgat	catggttttc	ggactgaaat	tgtgttaatc	ggaagttata	tgtgagccac	4680
attgattttttt	cctgtgagag	atgcccattt	gtactcattt	tacgactgtc	tcatgtccaa	4740
acaccatgtt	tattgttattt	accaggctac	tatttgcaga	tgcgtatcaac	atcaccaccc	4800
ccaccatctg	gatgtctggc	cagattccat	ccggaagcag	tggacaaattt	ctccattgt	4860
gctttccat	ttggcattttac	aatgttttaat	tttagttaat	ccacagttaa	aaattccat	4920
aatcataat	atctcgactt	ttcagcttgc	ctactgggttgc	cactattgt	ctcaaaacttt	4980
cgatccaaac	tatcagtgtat	tgaagtttat	cctttttaat	tccaataatt	cacagttgcc	5040
ggtatctacc	tccatttttgc	tccgtatgatt	cgcagtttttgc	cacagggttgc	aaatgtatct	5100
cgttcaatct	ttttatgggtt	attttcttgc	aatgtccatt	ttaatatttgc	tagaacacttgc	5160
ttatgtacat	tgtgttggta	ttcaatttgc	aaaacaatgt	aatttttttc	taaataacttgc	5220

cgtttctggg gtttctatca gcacttacta gctgacaaaaa actttccgt attcggaaatt	5280
agatttttat gcaagcaatg ttcattttt acacagtata gtatttattc ttactttga	5340
ttatattgct cgcaccccaa atgacaggtt tagtcttta aataagaaac catctagttt ttcattatca	5400
taatcttctt agtactagtt tagtcttta aataagaaac catctagttt ttcattatca	5460
ctcaactca gtccggacaaa tttaaattt ttactcgat aaaaaaattt tataattcag	5520
acaaaattatg tcttctcatt tttgatcgct	5550

<210> 2  
<211> 1470  
<212> DNA  
<213> *Caenorhabditis elegans*

<400> 2	60
atgaagtttta ttccctgaaat cacacttactc ttgctttat ttgtacactc tacacaggct	120
aaaggaaaaac gacggaaatg tccggagggt gctgtggtcgg aaggaaagat tatgaacacg	180
atcatgagca actacacgaa aatgttgcgg gacgcggagg acagcgtaca agttaatatt	240
gagattcatg tacaggatat gggaaagctt aatgaaatat catccgactt tgaaattgac	300
attttattca ctcaactgtg gcatgactcg gcaacttctt ttgctcatct tccggcttgc	360
aagcgaaata tcacaatgga aacacgactt ttacctaaga tttggctc aaacacgtgt	420
atgattaatt caaaaacgaac aaccgtccat gcatcaccat cggaaaatgt gatggttatt	480
ctgtacgaga atgaaacagt ctggatttaac catcgtctt gttcaaaatc accttgcaat	540
ttggatctgc gacagttcc tttcgatact caaaacttgcata tattaaatctt tgaatcctat	600
agtctataact cagaagaatg tgaacttcat tggatggaa aagctgtcac attaatgaag	660
ccaattcaac ttccctgactt tgatatgggtt cattattcaa cttaaaaggaa aactttactc	720
tatccaaacg ggtactggga tcagcttcaa gttactttca ctttcaaaacg acgatatgg	780
ttcttatatta ttcaaggcttca tggatccaaatacata tatttttcaaa tcatttttgc tggatctgc	840
ttctgcatttgg aaccaaaaggc tctgccccca agaacaactg tcggatctc atcttttca	900
gctcttactt tccagtttgg aaatatttg aaaaatcttca caagggtttc atatgtgaaa	960
gcaatggatg tggatgtct tggatgcata tcattttgtct tcggaaaccat ggtagaatttgc	1020
gcattttttt gttacatttc ccgttgcgt aacagcgtaa gaaacgcgg aacgcgcacgg	1080
gaacgaatga gaaattctca ggtgtggca aacggatctgt gtagaacttag aagcaacggg	1140
tatgcaaaacg ggggatctgtt aatctcacat tatcatccaa caagcaatgg aatggaaat	1200
aataatcgac atgatacacc tcaagttact ggaagaggat cacttcattcg aaacggggca	1260
ccatctccat taaaccttca aatgactaca ttgatttgcg agatccctct gacttttgc	1320
cagctgccag ttccatggaa atccgataga cccctgattt aagagatgcg atcaacatca	1380
ccacctccac catctggatg tctggccaga ttccatccgg aagcagtggaa caaattctcc	1440
attgttagctt ttccatttggc atttacaatg ttaatcttgc tctactggatgcactatttgc	1470
tctcaaaactt tcgatcaaaa ctatcgtga	

<210> 3  
<211> 489  
<212> PRT  
<213> *Caenorhabditis elegans*

<400> 3	
Met Lys Phe Ile Pro Glu Ile Thr Leu Leu Leu Leu Phe Val His	
1 5 10 15	
Ser Thr Gln Ala Lys Gly Lys Arg Arg Lys Cys Pro Glu Gly Ala Trp	
20 25 30	
Ser Glu Gly Lys Ile Met Asn Thr Ile Met Ser Asn Tyr Thr Lys Met	
35 40 45	
Leu Pro Asp Ala Glu Asp Ser Val Gln Val Asn Ile Glu Ile His Val	
50 55 60	
Gln Asp Met Gly Ser Leu Asn Glu Ile Ser Ser Asp Phe Glu Ile Asp	
65 70 75 80	
Ile Leu Phe Thr Gln Leu Trp His Asp Ser Ala Leu Ser Phe Ala His	
85 90 95	

Leu Pro Ala Cys Lys Arg Asn Ile Thr Met Glu Thr Arg Leu Leu Pro  
 100 105 110  
 Lys Ile Trp Ser Pro Asn Thr Cys Met Ile Asn Ser Lys Arg Thr Thr  
 115 120 125  
 Val His Ala Ser Pro Ser Glu Asn Val Met Val Ile Leu Tyr Glu Asn  
 130 135 140  
 Gly Thr Val Trp Ile Asn His Arg Leu Ser Val Lys Ser Pro Cys Asn  
 145 150 155 160  
 Leu Asp Leu Arg Gln Phe Pro Phe Asp Thr Gln Thr Cys Ile Leu Ile  
 165 170 175  
 Phe Glu Ser Tyr Ser His Asn Ser Glu Glu Val Glu Leu His Trp Met  
 180 185 190  
 Glu Glu Ala Val Thr Leu Met Lys Pro Ile Gln Leu Pro Asp Phe Asp  
 195 200 205  
 Met Val His Tyr Ser Thr Lys Lys Glu Thr Leu Leu Tyr Pro Asn Gly  
 210 215 220  
 Tyr Trp Asp Gln Leu Gln Val Thr Phe Thr Phe Lys Arg Arg Tyr Gly  
 225 230 235 240  
 Phe Tyr Ile Ile Gln Ala Tyr Val Pro Thr Tyr Leu Thr Ile Ile Val  
 245 250 255  
 Ser Trp Val Ser Phe Cys Met Glu Pro Lys Ala Leu Pro Ala Arg Thr  
 260 265 270  
 Thr Val Gly Ile Ser Ser Leu Leu Ala Leu Thr Phe Gln Phe Gly Asn  
 275 280 285  
 Ile Leu Lys Asn Leu Pro Arg Val Ser Tyr Val Lys Ala Met Asp Val  
 290 295 300  
 Trp Met Leu Gly Cys Ile Ser Phe Val Phe Gly Thr Met Val Glu Leu  
 305 310 315 320  
 Ala Phe Val Cys Tyr Ile Ser Arg Cys Gln Asn Ser Val Arg Asn Ala  
 325 330 335  
 Glu Arg Arg Arg Glu Arg Met Arg Asn Ser Gln Val Trp Ala Asn Gly  
 340 345 350  
 Ser Cys Arg Thr Arg Ser Asn Gly Tyr Ala Asn Gly Ser Val Ile  
 355 360 365  
 Ser His Tyr His Pro Thr Ser Asn Gly Asn Gly Asn Asn Arg His  
 370 375 380  
 Asp Thr Pro Gln Val Thr Gly Arg Gly Ser Leu His Arg Asn Gly Pro  
 385 390 395 400  
 Pro Ser Pro Leu Asn Leu Gln Met Thr Thr Phe Asp Ser Glu Ile Pro  
 405 410 415  
 Leu Thr Phe Asp Gln Leu Pro Val Ser Met Glu Ser Asp Arg Pro Leu  
 420 425 430  
 Ile Glu Glu Met Arg Ser Thr Ser Pro Pro Pro Ser Gly Cys Leu  
 435 440 445  
 Ala Arg Phe His Pro Glu Ala Val Asp Lys Phe Ser Ile Val Ala Phe  
 450 455 460  
 Pro Leu Ala Phe Thr Met Phe Asn Leu Val Tyr Trp Trp His Tyr Leu  
 465 470 475 480  
 Ser Gln Thr Phe Asp Gln Asn Tyr Gln  
 485

<210> 4  
 <211> 1417  
 <212> DNA  
 <213> *Caenorhabditis elegans*

<400> 4  
 tcatttca cggaacgacg aatttatccc gtcgttctt ccttccgtt ttaactcata

tctcttcctg	gatcctt <del>cc</del> ag	agctcttgc	aattcctcac	gtttttttt	gttttttctgt	120
cgtttaattg	tggaaacaca	tatccgtcct	cttggaaaca	gcatcagaaa	actttctgt	180
ctccgtgtcc	ttctacttac	tctgattgcc	ttagttagtc	acatcgcaag	caacaactaa	240
ctgccaatgg	gaggagccag	ttggagcagg	gtgcgtgctc	ggtgctctt	tcagaagggtt	300
ttctcttgtg	ccagcatgct	ttttttagggc	tgtgtcatca	caatgaacat	gtgtgagttc	360
atccgtctgg	attattcttt	ttcttaacgtc	ttctgagttac	ttcataacttt	ccaaattttt	420
caactgaact	tttcttcctt	tctcattgaa	gtgggtttggt	tttggtcgcg	tgatcaacgg	480
atcctacttt	tttggaaacaa	aatgtttttg	aagtttcaca	gactgatttc	gggggttttt	540
caaagaatat	atcccctctc	gagcaagaga	aaattccaga	aaatagtagt	tttttcaat	600
tagtcgttc	atttgacta	gctaaaaaac	ttgcaactta	tggcttaaa	acatgtgttg	660
gcttcataca	aaaacattta	actagtgtt	ttccagttt	gtgttcgttt	cattttctca	720
ccaaactgac	aataattact	ttctgtgaac	gtgttttgt	ggcaagctcc	cgaatatttt	780
tttctcttct	cacgtcttgt	tattttctcg	atttttatttt	ctgaatctgt	gcggttttca	840
atcaatttga	ttgcgataat	tattctatca	gaaaatataatt	ttcagaaatc	caaatactcc	900
aggtgccaat	gcccgtgaaag	aaaattatga	agtttattcc	tgaaatcaca	ctactcttgc	960
ttttatttgt	acactctaca	caggttagtt	tctcttgaat	gtccatttt	atatttatag	1020
aacacttta	tgtacattgt	gttggatttc	aattcgaaaa	acaatgaaat	ttatttctaa	1080
ataactgcgt	ttctgggtt	tctatcagca	cttacttagct	gacaaaaact	tttccgtatt	1140
cggaattaga	tttttatgca	agcaatgtt	catttttaca	cagttatgta	tttatttctta	1200
cttttgatta	tattgctcgc	accctaaatg	acaggttata	gaaattaacc	gtttttcaga	1260
gtattttaa	tcttcttagt	actagtttag	ttctttaaat	aagaaccat	ctagttttc	1320
attatcactc	aacttcagtc	ggacaaattt	taaattttt	actcgataaa	aaaattttat	1380
aattcagaca	aattatgtct	tctcattttt	gatcgct			1417

<210> 5  
<211> 5550  
<212> DNA  
<213> *Caenorhabditis elegans*



agattttat gcaagcaatg tttcattttt acacagtata gtatttattc ttactttga	5340
ttatattgct cgacccctaa atgacaggtt ttagaaattt accgottttc agagtattt	5400
taatcttctt agtactagtt tagttctta aataagaaac catctagttt ttcattatca	5460
ctcaactca gtcggacaaa tttaaattt ttactcgat aaaaaaattt tataattcag	5520
acaaattatg tcttctcatt ttgatcgct	5550

<210> 6  
 <211> 1470  
 <212> DNA  
 <213> *Caenorhabditis elegans*

<400> 6	
atgaaggtaa ttccctgaaat cacactactc ttgctttat ttgtacactc tacacaggct	60
aaaggaaaac gacggaaatg tccggagggt gcgtggtcgg aaggaaagat tatgaacacg	120
atcatgagca actacacgaa aatgttgccc gacgcggagg acagcgtaca agttaatatt	180
gagatttcatg tacaggatat gggaaagctt aatgaaatat catccgactt taaaatttgc	240
attttattca ctcaactgtg gcatgactcg gcactttctt ttgctcatct tccggcttgc	300
aagcgaataa tcacaatgga aacacgactt ttacctaaga ttggcttcc aaacacgtgt	360
atgattaatt caaaacgaac aaccgtccat gcatcaccat cggaaaatgt gatggttatt	420
ctgtacgaga atgaaacagt ctggattaaac catcgcttta gtgtcaaattc accttgcaat	480
ttggatctgc gacagtttcc ttgcataact ccaaacttgcata tattatctt tgaatcctat	540
agtcatact cagaagaagt tgaacttcat ttgatggaaag aagctgtcac attaatgaag	600
ccaattcaac ttccctgactt tgatatggtt cattattcaa ctaaaaagga aactttactc	660
tatccaaacg ggtactggga tcagcttcaa gttactttca ctttccaaacg acgatatgga	720
ttctatatta ttcaaggccta ttttccaaatac tatcttacaa tcattgttca ttgggtttca	780
ttctgcattgg aacccaaaacg tctgcggca agaacaactg tcggaatctc atctttcttca	840
gttcttactt tccagtttgg aaatattttg aaaaatcttca caagggttca atatgtgaaa	900
gcaatggatg tttggatgtc ttggatgcata tcattttgtt tcggaaaccat ggttagaattt	960
gcattttttt gtacatttc ccgttgcgt aacagcgtaa gaaacgcggg acgacgcgg	1020
gaacgaatga gaaattctca ggttgggca aacggatgtgt gttagaacttag aagcaacggg	1080
tatgcaaaacg ggggatctgt aatctcacat tatcatccaa caagcaatgg aaatgggaaat	1140
aataatcgac atgatacacc tcaaggtaact ggaagaggat cacttcatcg aaacggggca	1200
ccatctccat taaaccttca aatgactaca ttgatttgcgg agatcccttct gacttttgc	1260
cagctgccag ttccatggaa atccgataga cccctgattt aagagatgcg atcaacatca	1320
ccacctccac catctggatg tctggccaga ttccatccgg aagcagtggaa caaattctcc	1380
attgttagttt ttccatttggc atttacaatg ttaatcttgc tctactgggtt gcaacttgc	1440
tctcaaaactt tccatggatg tttttttttt tttttttttt tttttttttt tttttttttt	1470